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<u>Patent</u>

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the

Application of:

SANJAY AGRAWAL, ET AL.

Examiner: N

NOT YET

ASSIGNED

Application No.:

10/601,416

Art Unit:

2171

Filed:

JUNE 23, 2003

Title:

INTEGRATING HORIZONTAL

PARTITIONING INTO PHYSICAL

DATABASE DESIGN

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 together with a copy of the document(s) listed on that form. Applicant respectfully requests that the Examiner consider the listed document(s), initial the enclosed Form PTO-1449 to indicate such consideration, and return a copy of the initialed Form PTO-1449 to the Applicant.

This Information Disclosure Statement is being submitted pursuant to 37 C.F.R. § 1.97(b).

I hereby certify that this paper is being deposited today with the U.S. Postal Service as 1st Class Mail addressed to the Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

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Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement shall not be construed to be an admission that the information cited in this Information Disclosure Statement is, or is considered to be, material to patentability.

The Commissioner is hereby authorized to charge any required fee under 37 C.F.R. § 1.17 in connection with this communication to our Deposit Account No. 23-0630.

Respectfully submitted,

Date: August 27, 2003

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Form PTO-1449

(Modified) Patent and Trademark Office

Attorney=s Docket Number 16-388

Application Number 10/601,410

INFORMATION DISCLOSURE CITATION

16-388 10/601,416

Applicant Filed June 23, 2003

Examiner Art Unit 2171

Sheet 1 of 2

U.S. PATENT DOCUMENTS

1 0/		U.	S. PATENT DOCUMENTS				
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		FODI	EIGN PATENT DOCUMENTS	l	I.,		
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TDANC	LATION
	DOCUMENT NUMBER	DAIL	COONINI	CLASS	SUBCLASS	YES	NO
			OTHER DOCUMENTS		<u>, </u>		!
**	Agrawal, R., Ramakri	shnan, S. Fast	Algorithms for Mining Association Rules	. Proc. of VI	DB 1994.		
	Agrawal, S., Chaudhuri, S., and Narasayya, V. Automated Selection of Materialized Views and Indexes for SQL						
	<u>Databases.</u> Proceedings of VLDB 2000.						
	Ailamaki, A., DeWitt D.J., Hill M.D., and Skounakis M. Weaving Relations for Cache Performance. VLDB 2001.						
	Chaudhuri, S., and Narasayya, V. An Efficient, Cost-Driven Index Selection Tool for Microsoft SQL Server. VLDB 1997.						
	Chaudhuri, S., and Narasayya, V. AutoAdmin "What-if" Index Analysis Utility. Proc. of ACM SIGMOD 1998.						
	Chaudhuri, S., and Narasayya, V. Index Merging. Proceedings of ICDE 1999.						
	Cornell D.W., Yu P.S. An Effective Approach to Vertical Partitioning for Physical Design of Relational Databases. IEEE Transactions on Software Engg, Vol 16, No 2, 1990.						
	De P., Park J.S., and Pirkul H. An Integrated Model of Record Segmentation and Access Path Selection for Databases. Information Systems, Vol 13, No 1, 1988.						
	Navathe S., Ra M. Vertical Partitioning for Databases Design: A Graphical Algorithm. Proc. of SIGMOD 1989.						
	Rao, J., Zhang, C., Lohman, G., and Megiddo, N. <u>Automating Physical Database Design in a Parallel Database</u> . Proceedings of the ACM SIGMOD 2002.						
	Ramamurthy R., DeWitt D.J., and Su Q. A Case for Fractured Mirrors. Proceedings of VLDB 2002.						
	Sacca D., and Wiederhold G. <u>Database Partitioning in a Cluster of Processors</u> . ACM TODS, Vol 10, No 1, Mar 1985.						
	Serna, M., Trevisan L., and Xhafa, F. The (Parallel) Approximability of Non-Boolean Satisfiability Problems and Restricted Integer Programming. Proc. of the 15th Annual Symposium on Theoretical Aspects of Comp. Sc, Lecture Notes in Comp. Sc. 1373, Springer Verlag, 1998. Pp 488-498.						
	Stohr T., Martens H., and Rahm E. <u>Multi-Dimensional Database Allocation for Parallel Data Warehouses.</u> Proceedings of VLDB 2000.						
	Valentin, G., Zuliani, M., Zilio, D., and Lohman, G. <u>DB2 Advisor: An Optimizer Smart Enough to Recommend Its Own Indexes.</u> Proceedings of ICDE 2000.						
	Zeller, B., and Kemper, A. Experience Report. Exploiting Advanced Database Optimization Features for Large-Scale SAP R/3 Installations. Proceedings of VLDB 2002.						
	Zilio, D. Physical Da PhD Thesis, Dept. of		Decision Algorithms and Concurrent Reor v. of Toronto, 1998.	ganization fo	r Parallel Data	base Syst	ems.
EXAMINER			DATE CONSIDERED				

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Attorney=s Docket Number Application Number Form PTO-1449 ENT OF COMMERCE 10/601,416 16-388 (Modified)Patent and Trademark Office Applicant INFORMATION DISCLOSURE CITATION Sanjay Agrawal, et al. June 23, 2003 Examiner Art Unit 2171 Sheet 2 of 2 U.S. PATENT DOCUMENTS FILING DATE IF EXAMINER APPROPRIATE DOCUMENT NUMBER CLASS SUBCLASS DATE NAME INITIALS FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER DATE COUNTRY CLASS **SUBCLASS** TRANSLATION YES **OTHER DOCUMENTS** Zilio, D., Jhingran, A., Padmanabhan, S. Partitioning Key Selection for a Shared-Nothing Parallel Database System. IBM Research Report RC 19820. 1994. Gray, J. DBGen Synthetic Data Generator for SQL Tables and Text files on Windows Platforms. http://www.research.microsoft.com/~gray/dbgen/, December 1999. Gupta H., Harinarayan V., Rajaramana A., and Ullman J.D. Index Selection for OLAP. Proc. ICDE 1997. EXAMINER DATE CONSIDERED EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP > 609. Draw line through citation if not in

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